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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/884,925	06/21/2001	Jack Chen	112.P55008	3893
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			VILLECCO, JOHN M	
BEAVERTON	BEAVERTON, OR 97006		ART UNIT	PAPER NUMBER
			2622	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	09/884,925	CHEN ET AL.				
Office Action Summary	Examiner	Art Unit				
	John M. Villecco	2622				
The MAILING DATE of this communication Period for Reply	appears on the cover sheet w	ith the correspondence address				
A SHORTENED STATUTORY PERIOD FOR REWHICHEVER IS LONGER, FROM THE MAILING Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory per Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the material patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION OF THIS COMMUNICA	CATION. reply be timely filed NTHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 20						
<u> </u>	<i>,</i> —					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims	,,					
4)	drawn from consideration.					
9) ☐ The specification is objected to by the Exam 10) ☑ The drawing(s) filed on 21 June 2001 is/are: Applicant may not request that any objection to the Replacement drawing sheet(s) including the contained the	a) \square accepted or b) \square objective drawing(s) be held in abeyatection is required if the drawing	nce. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for fore a) All b) Some * c) None of: 1. Certified copies of the priority documents. 2. Certified copies of the priority documents. 3. Copies of the certified copies of the papplication from the International Bure. * See the attached detailed Office action for a literature. 	ents have been received. ents have been received in A priority documents have beer reau (PCT Rule 17.2(a)).	Application No received in this National Stage				
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	Paper No	Summary (PTO-413) (s)/Mail Date Informal Patent Application 				

Art Unit: 2622

DETAILED ACTION

Response to Arguments

- 1. Applicant's arguments with respect to claims 15-21 and 35-41 in view of Bertis and Kusada (and in further view of Ochi, Maxium Technologies, or Haranishi) have been considered but are moot in view of the new ground(s) of rejection.
- 2. Applicant's arguments with respect to claims 28-34 in view of Hashimoto and Allen have been considered but are moot in view of the new ground(s) of rejection. Please see the new grounds of rejection presented on the following pages.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. <u>Claims 15-17, 19, 28-31, 34-37, and 39-41 are rejected under 35 U.S.C. 103(a) as</u>
 being unpatentable over Oliver (U.S. Patent No. 6,289,140) in view of Hashimoto et al. (U.S. Patent No. 6,111,604).
- 5. Regarding *claim 15*, Oliver discloses a scanner or digital camera capable of using voice commands to carry out operations. More specifically, Oliver discloses an image pickup component (image pickup, 112) for transforming the image signal into a first analog signal, a sound pickup component (voice pickup, 102) for capturing a second analog signal (col. 5, lines

Art Unit: 2622

7-8), a second analog-digital converter (A/D converter, 104) connected to the sound pickup component (voice pickup, 102) for converting the second analog signal to a second digital signal, and a processor (controller, 106) for generating image and sound files, and carrying out processor actions, in response to a determination that the second digital signal corresponds to a voice control command. For instance, after processing the voice data and determining a command has been said, the processor carries out the command. Commands include "scan", "save", "delete", "left", "zoom in", and "send". See column 2, lines 47-60 and column 5, line 1 to column 6, line 30. Although, Oliver provides more detail on how a scanner would operate, Oliver does disclose that the invention could also be implemented into a digital camera. Therefore, if the invention where implemented into a digital camera, a first analog-digital converter would inherently have to be included in order to generate a digital image signal.

Oliver, however, fails to specifically disclose that the processor produces a multimedia data file comprising image and sound information in response to the voice control command. Hashimoto, on the other hand, discloses that it was well known in the art at the time the invention was made to generate a multimedia data file for transfer of image and sound data out of an image pickup device. More specifically, Hashimoto discloses a camera (100) which uses a CCD (9) and microphone (1) to capture image and sound data, respectively. Before, the transfer of image and audio data out of the camera, a relation file is read to determine the relationship between image and audio files. Thereafter, a multimedia data file (27) is generated with image and audio data for transfer out of the camera (100). The generated file allows for the related data to be transferred out in relation to each other. See column 11, lines 18-42. Thus, by generating one file for transfer, the image and audio data will always be associated with each other at the

Art Unit: 2622

destination location. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to generate a multimedia data file for transfer out of the camera of Oliver, when a "send" or "send all" command is said, so that the related image and sound data are always transferred and associated with each other and the destination location.

- 6. As for *claim 16*, Hashimoto discloses the use of a lens (7) for focusing the image signal and a photoelectric converting element (CCD, 9) for sensing the focusing image signal to generate a first analog signal.
- 7. With regard to *claim 17*, Hashimoto discloses the use of a CCD (charge coupled device) used as the photoelectric converting element.
- 8. Regarding *claim 19*, Oliver discloses that their invention can be used in scanner, as well as a digital camera. Official Notice is taken as to the fact that it is well known in the art that scanners often include reflection mirrors to reflect light to a lens set. The use of a reflection mirror allows for the redirection of the optical axis along a different direction, often making the dimensions of the scanner smaller. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a reflection mirror in the scanner of Oliver for reflecting light from a document to a lens set in order to make the dimensions of the scanner smaller.
- 9. As for *claim 28*, Oliver discloses a scanner or digital camera capable of using voice commands to carry out operations. More specifically, Oliver discloses an image pickup component (image pickup, 112) for generating a digital signal of an object, and a sound pickup device (voice pickup, 102) and A/D converter (104) for generating a sound digital signal and a voice signal capable of being used in a voice recognition routine. In addition, Oliver discloses a

Art Unit: 2622

processor (controller, 106) for generating image and sound files, and carrying out processor actions, in response to a determination that the sound digital signal corresponds to a voice control command. For instance, after processing the voice data and determining a command has been said, the processor carries out the command. Commands include "scan", "save", "delete", "left", "zoom in", and "send". See column 2, lines 47-60 and column 5, line 1 to column 6, line 30. Although Oliver provides more detail on how a scanner would operate, Oliver does disclose that the invention could also be implemented into a digital camera. Therefore, if the invention where implemented into a digital camera, a first analog-digital converter would inherently have to be included in order to generate a digital image signal.

Oliver, however, fails to explicitly disclose the use of a multiplexer and processor for generating a multimedia data file. Hashimoto, on the other hand, discloses that it was well known in the art at the time the invention was made to multiplex image and sound data and to generate a multimedia data file for transfer of image and sound data out of an image pickup device. More specifically, Hashimoto discloses an image pickup device (photographing portion, 6) for generating a image digital signal of an object, a sound pickup device (microphone, 1 and A/D converter, 4) for generating a sound digital signal, a multiplexer and a processor (CPU, 23 and FIFO circuit, 23) for combining the digital image and sound signals and producing a single file for transmission to the external device. Hashimoto discloses a camera (100) which uses a CCD (9) and microphone (1) to capture image and sound data, respectively. Before, the transfer of image and audio data out of the camera, a relation file is read to determine the relationship between image and audio files. Thereafter, a multimedia data file (27) is generated with image and audio data for transfer out of the camera (100). The generated file allows for the related data

Art Unit: 2622

to be transferred out in relation to each other. See column 11, lines 18-42. Thus, by generating one file for transfer, the image and audio data will always be associated with each other at the destination location. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to generate a multimedia data file for transfer out of the camera of Oliver, when a "send" or "send all" command is said, so that the related image and sound data are always transferred and associated with each other and the destination location.

- 10. With regard to *claim 29*, Oliver discloses that the image pickup component (image pickup, 112) receives an image signal and inherently converts it to an analog signal. Furthermore, although Oliver provides more detail on how a scanner would operate, Oliver does disclose that the invention could also be implemented into a digital camera. Therefore, if the invention where implemented into a digital camera, a first analog-digital converter would inherently have to be included in order to generate a digital image signal. Additionally, Oliver discloses the use of an A/D converter (104) for converting the sound data to a digital signal.
- 11. Regarding *claim 30*, Oliver discloses that their invention can be used in scanner, as well as a digital camera. Official Notice is taken as to the fact that it is well known in the art that scanners often include reflection mirrors to reflect light to a lens set. The use of a reflection mirror allows for the redirection of the optical axis along a different direction, often making the dimensions of the scanner smaller. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a reflection mirror in the scanner of Oliver for reflecting light from a document to a lens set in order to make the dimensions of the scanner smaller. Additionally, Hashimoto discloses that cameras typically include a lens (7) and photoelectric converting element (CCD, 9).

09/884,925 Art Unit: 2622

- 12. As for *claim 31*, Hashimoto discloses the use of a CCD (charge coupled device) used as the photoelectric converting element.
- 13. With regard to *claim 34*, as mentioned above in the discussion of claim 28, the combination of Oliver and Hashimoto discloses all of the limitations of the parent claim. While both Oliver and Hashimoto disclose the use of a controller (106) and CPU (23), respectively, neither of the aforementioned reference specifically discloses that the processor produces the multimedia file via a multitasking operation. Official Notice is taken as to the fact that it is well known in the art that CPU's commonly perform applications or operations via a multitasking function. Multitasking operations allow for multiple tasks to be carried out virtually simultaneously by sharing the CPU time per application. Therefore, it would have been obvious to enable the CPU or microprocessor of the camera of Hashimoto or Oliver to generate the multimedia data file via a multitasking operation so that the CPU can carry out more than one operation at a time.
- 14. *Claim 35* is considered a method claim corresponding to claim 15. Please see the discussion of claim 15 on the preceding pages.
- 15. *Claim 36* is considered a method claim corresponding to claim 16. Please see the discussion of claim 16 on the preceding pages.
- 16. *Claim 37* is considered a method claim corresponding to claim 17. Please see the discussion of claim 17 on the preceding pages.
- 17. As for *claim 39*, which depends upon claim 35, an image sensor can be considered a scanning device. Additionally, Oliver specifically discloses that his invention can be implemented in a scanning device.

09/884,925 Art Unit: 2622

- 18. *Claim 40* is considered a means plus function claim corresponding to claim 15. Please see the discussion of claim 15 on the preceding pages.
- 19. *Claim 41* is considered a method claim corresponding to claim 16. Please see the discussion of claim 16 on the preceding pages.
- 20. <u>Claims 18, 32, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oliver (U.S. Patent No. 6,289,140) in view of Hashimoto et al. (U.S. Patent No. 6,111,604) and further in view of Maxium Technologies (Internet Publication, 2000).</u>
- Regarding *claims 18, 32, and 38*, as mentioned above in the discussion of claim 16 and 35, respectively, the combination of Oliver and Hashimoto discloses all of the limitations of the parent claim. However, the combination of the aforementioned references fails to explicitly state that the image sensor is a CIS. The Maxium Technologies Publication on the other hand, discloses that the use of contact image sensors (CIS) is well known in the art. The integration of CIS image sensors reduces the space needed for other components allowing for thinner and lighter products. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a CIS image sensor instead of the CCD image sensor in Hashimoto or Oliver so that the camera is made smaller and lighter.
- 22. <u>Claims 20, 21, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oliver (U.S. Patent No. 6,289,140) in view of Hashimoto et al. (U.S. Patent No. 6,111,604) and further in view of Haranishi (U.S. Patent No. 5,764,779).</u>

Art Unit: 2622

- 23. Regarding *claims 20 and 33*, as mentioned above in the discussion of claim 15, the combination of Oliver and Hashimoto discloses all of the limitations of the parent claim. The aforementioned reference, however, fail to explicitly state that the microphone includes a filter for filtering off a noise signal from the analog signal. Haranishi, on the other hand, discloses that it is well known in the art to provide filters in a microphone for filter off noise. More specifically, Haranishi discloses a bandpass filter (2) for filter out noise from a microphone (1) and allowing only desired frequencies to pass. This feature allows for the microphone to only allow frequencies of the human voice to pass, thus increasing the quality of the signal. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a filter in the microphone of Hashimoto or Oliver so that a higher quality sound signal is generated.
- 24. As for *claim 21*, Haranishi discloses only allowing frequencies of the human voice to pass through the bandpass filter (2). See the abstract.
- 25. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 2622

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John M. Villecco whose telephone number is (571) 272-7319. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

John M. Villecco

Primary Examiner, Art Unit 2622

December 3, 2007